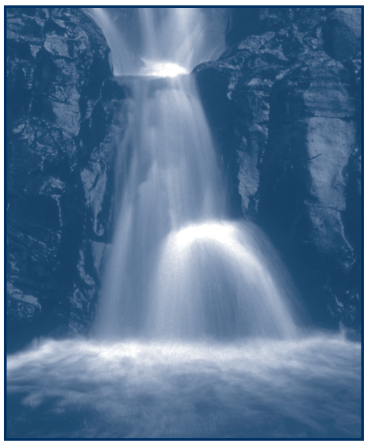
2011 Annual Water Quality Report

City of Falls Church Water Utility
Main System

Dear Valued Customer:



We are pleased to present the following summary detailing the quality of the water provided to you over the past year. The Safe Drinking Water Act (SDWA) requires utilities to issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report specifies where our water comes from, what it contains, and the risks our water testing and treatment efforts are designed to prevent. The City of Falls Church Water Utility is committed to providing you with a safe, dependable, and sufficient water supply at reasonable rates.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

Ban bao cao co ghi nhung chi tiet quan trong ve pham chat nuoc trong cong dong quy vi. Hay nho nguoi thong dich, hoac hoi mot nguoi ban biet ro ve van de nay.

Informed consumers are our best allies in maintaining safe drinking water. More information is available online at www.drinktap.org and at www.epa.gov/safewater. If you have any questions about this report, please contact the Department of Public Utilities at 703-248-5070 (TTY 711) or water@fallschurchva.gov. This report is also published on the City's Web site at www.fallschurchva.gov.

For information about the next opportunity for public participation in decisions about your drinking water, please call 703-248-5070 (TTY 711). Falls Church City Council meetings are generally held the second and fourth Mondays of each month at 7:30 p.m. in City Hall, located at 300 Park Ave., Falls Church VA 22046.

Wyatt Shields
City Manager

What Is the Source of My Drinking Water?

The City of Falls Church Water Utility is supplied by the Washington Aqueduct division of the U.S. Army Corps of Engineers. Raw water is drawn from the Potomac River and treated at the Washington Aqueduct's Dalecarlia and McMillan water treatment plants, both of which can provide water for distribution to the City's water customers.

A detailed source water assessment to find better ways to protect the water sources for the Washington Aqueduct was completed in 2002 by the Interstate Commission on the Potomac River Basin (ICPRB). The assessment identified urban runoff, toxic spills, agriculture and inadequate wastewater treatment as potential contamination sources to the water supply. Contact the ICPRB at 301-984-1908 or visit their website at www.potomacriver.org for more information.

How Do I Read the Charts Below?

The City of Falls Church and our water supplier routinely monitor for contaminants in your drinking water according to federal and state laws. The first table shows the results from monitoring that we conducted, while the second table shows the results of monitoring by the Washington Aqueduct.

In the tables you will find many terms and abbreviations that are unfamiliar. To help you better understand these terms, we've provided the following definitions:

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level or MRDL: The highest level of a residual disinfectant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of residual disinfectant below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

Detected Level: The highest level detected of a contaminant for comparisons against the acceptance levels for each parameter. These levels could be the single highest measurement, or an average of values, depending on the contaminant.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment; or other requirement that a water system must follow.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Parts per billion (ppb): One part per billion corresponds to a single penny in $10,000,000.

Parts per million (ppm): One part per million corresponds to a single penny in $10,000.

Parts per trillion (ppt): One part per million corresponds to a single penny in $10,000,000,000.

Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.

Perchlorate Research Update

Perchlorate is a naturally occurring compound. It can also be a by-product of industrial activity. Its presence in drinking water is currently unregulated and utilities are not required to monitor for it. In 2007, the Washington Aqueduct began voluntarily participating in a non-regulatory perchlorate sampling project for the Potomac River funded by the U.S. Environmental Protection Agency (EPA), which in 2009 proposed an interim health advisory of 15 parts per billion (ppb).

In 2010, finished water sample results for perchlorate collected by the Washington Aqueduct at both treatment plants ranged between none detected and 3.7 ppb. If you have special health concerns, you may want to get additional information from the EPA at www.epa.gov/safewater/contaminants/unregulated/perchlorate.html or contact the EPA's Safe Drinking Water Hotline at 800-426-4791 (TTY711).

2010 Finished Water Characteristics, City of Falls Church Distribution System Monitoring — **TABLE 1**

Parameter	Unit	MCLG	MCL	Reporting Level	Range	Violation?	Major Sources
Total Coliform	% of samples	0	5	2	N/A	No	Naturally present in environment
Chlorine*	ppm	(MRDLG) 4	(MRDL) 4	3.2	0 - 4.3	No	Water additive used to control microbes
Total Trihalomethanes	ppb	0	80	41	19 - 62	No	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	0	60	30	15 - 36	No	Byproduct of drinking water chlorination
Copper**	ppm	Action Level: 1.3	Action Level: 1.3	0.06	0.01 - 0.13	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead**	ppb	Action Level: 0	Action Level: 15	1	<0.5 - 6.5	No	Corrosion of household plumbing systems; erosion of natural deposits

* Chlorine is combined with ammonia to form chloramine. ** Data from 2009, due to Reduced Monitoring Status

2010 Finished Water Characteristics, Source Monitoring for Regulated Parameters — **TABLE 2**

Parameter	Unit	MCLG	MCL	Reporting Level	Range	Violation?	Major Sources
Arsenic	ppb	0	10	0.8	ND - 0.08	No	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
Barium	ppm	2	2	0.07	0.03 - 0.07	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/photon emitters*	pCi/L	0	50**	4	ND - 4	No	Decay of natural & man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Cadmium	ppb	5	5	0.2	ND - 0.2		Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	ppb	100	100	4.4	ND - 4.4	No	Discharge from steel & pulp mills; erosion of natural deposits
Combined radium 226/228*	pCi/L	0	5	2	ND - 2	No	Erosion of natural deposits
Ethylene dibromide (EDB)	ppt	0	50	10	ND - 10	No	Discharge from petroleum refineries
Fluoride	ppm	4	4	1.2	0.5 - 1.2	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	ppm	10	10	3.1	0.06 - 3.1	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	ppm	1	1	0.09	ND - 0.09	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	ppb	50	50	1.3	ND - 1.3	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Total Organic Carbon	% ppm removal	N/A	TT (0% - 25% required)	37%	25% - 51%	No	Naturally present in environment
Turbidity***	NTU	N/A	TT	0.18 = highest single hourly measurement. Lowest monthly percentage of samples meeting turbidity requirements = 100%		No	Soil runoff

* Most recent monitoring for this parameter was 2008. ** The MCL for Beta particles is written as 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for Beta particles.

*** The turbidity level of filtered water shall be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month, and shall at no time exceed 1 NTU.

Key To Tables

AL = Action Level
MCL = Maximum Contaminant Level
TT = Treatment Technique
MCLG = Maximum Contaminant Level Goal
MRDL = Maximum Residual Disinfectant Level
ppb = parts per billion, or micrograms per liter (µg/l)
NTU = Nephelometric Turbidity Units
MRDLG = Maximum Residual Disinfectant Level Goal
mrem/year = millirems per year
pci/l = picocuries per liter (a measure of radioactivity)
ND = none detected
ppm = parts per million, or milligrams per liter (mg/l)
N/A = not applicable
ppt = parts per trillion

Lead in Drinking Water

The City's monitoring continues to show overall lead levels below the Action Level established in the Lead and Copper Rule (see Table 1). If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Falls Church is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at http://www.epa.gov/safewater/lead.

Important Health Information About Drinking Water

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Should Some People Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

NOTICE TO CUSTOMERS

In keeping with National Primary Drinking Water Regulations, we are informing you of violations of a portion of state regulations concerning frequency of monitoring drinking water. Regular monitoring of our drinking water for specific contaminants is required on a regular basis. Results of this monitoring indicate whether or not your drinking water meets health standards.

- For 12 hours beginning October 20, 2010, the Washington Aqueduct did not monitor or test for turbidity for 2 of its 36 filters, and therefore cannot be sure of the quality of your drinking water during that time. Concurrent monitoring of all other processes and turbidity instruments showed no problems. Past records show the Washington Aqueduct has continually demonstrated compliance with the regulations regarding water treatment and quality. The Washington Aqueduct has addressed this lapse in their monitoring protocol by retraining operators on proper monitoring procedures.
- During February 2011, the City of Falls Church did not complete all monitoring or testing for coliform bacteria and chlorine residual and therefore cannot be sure of the quality of our drinking water during that time. One hundred routine samples for bacteriological analysis were required, and 99 were analyzed. Past records show that the system has had no problems with bacteriological contamination and chlorine residual. We have revised our sample collection tracking and procedures to ensure that all required sampling in our distribution system is done in accordance with the state drinking water regulations.

There is nothing you need to do at this time.

Any future violations will be reported as required by state regulations in order to increase consumers' awareness of conditions that exist in their public water systems.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact the Department of Public Utilities at 703-248-5070.

2011 Annual Water Quality Report

This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

El informe contiene información importante sobre la calidad del agua en su comunidad. Traduźcalo o hable con alguien que lo entienda bien.

Bản báo cáo có ghi nhưng chi tiết quan trọng về phẩm chất nước trong cọng đọng quỵ vị. Hãy nhờ người thông dịch, hoặc hỏi một người bản biết rõ về vấn đề này.

Want More Information?

If you have any questions about this report, or need more information, please let us know. Public Utilities Customer Service billing questions): 703-248-5071 (TTY 711), Public Utilities Engineering (technical questions): 703-248-5070 (TTY 711) This report may be viewed on the Web at www.fallschurchva.gov. Please address correspondence to: **City of Falls Church Department of Public Utilities, 800 West Broad Street, Suite 207, Falls Church, VA 22046.**

Policy of Non-Discrimination on the Basis of Disability

The City of Falls Church does not discriminate on the basis of disability in its employment practices or in the admission to, access to, or operation of its services, programs, or activities. Cindy Mester, 300 Park Avenue, Falls Church, Virginia 22046 has been designated to coordinate compliance with the ADA non-discrimination requirement.

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